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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,747	12/02/2003	Ivan V. Mendenhall	AAI-14303	3268
45483	7590	06/14/2007		
AUTOLIV ASP, INC Attn: Sally J. Brown ESQ 3350 Airport Rd OGDEN, UT 84405			EXAMINER FELTON, AILEEN BAKER	
			ART UNIT 1755	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/725,747	<b>Applicant(s)</b> MENDENHALL ET AL.	
	<b>Examiner</b> Aileen B. Felton	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 12,13 and 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11,14 and 21-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant contends that claims 16-20 constitute product by process claims. The claims are not written in this form and are written only as method claims, see MPEP 2113. Note that the election/restriction requirement was made final in the Office action mailed on 12/8/2006.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-10, 21, 22, 24, 29, and 30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Spenadel et al (3,697,455).

Spenadel et al discloses a composition that comprises Viton A, blowing agent, solid fuel such as magnesium, plasticizer, and curing/crosslinking agent (col. 1, lines 34-42 and lines 69-72; col. 4, lines 20-31, and Recipe table. The composition is heated to form a porous structure (see examples). It is also disclosed that a known blowing agent is sodium bicarbonate (example 1). Spenadel appears to disclose these ingredients in the claimed ranges, see Recipe Table. To the extent necessary, it would be obvious to vary these amounts to achieve a desired result. It is well-settled that optimizing a result effective variable is well within the expected ability of a person of

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ordinary skill in the subject art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

It would also be obvious to use sodium bicarbonate as a blowing agent since Spenadel suggest that it is a known blowing agent that can be used.

Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation (i.e. "adapted for", "effective to", etc.). These clauses are essentially method limitations or statements of intended or desired use and do not serve to patentably distinguish the claimed structure over that of the reference. See *In re Pearson*, 181 USPQ 641; *In re Yanush*, 177 USPQ 705; *In re Finsterwalder*, 168 USPQ 530; *In re Casey*, 512 USPQ 235; *In re Otto*, 136 USPQ 458; *Ex parte Masham*, 2 USPQ 2nd 1647.

4. Claims 6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spenadel et al (3,697,455) as applied to claims 1-5, 7-10, 21, 22, and 24 above, and further in view of Passino (2,748,098).

Passino teaches the use of polytrifluorochloroethylene as a plasticizer for perhalocarbon polymers (see claim 9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the plasticizer as taught by Passino with the composition of Spenadel since Passino suggests that it is useful with fluoropolymer binders and since Spenadel discloses that plasticizers may be used with Viton A, a fluoropolymer.

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5. Claims 11 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spenadel et al (3,697,455) as applied to claims 1-5, 7-10, 21, 22, and 24 above, and further in view of Engel et al (3,663,323).

Engel et al teaches the use of trimethylolpropane trimethacrylate and benzoyl peroxide as crosslinking agents for polymers in explosive compositions (see sbstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the crosslinking agents as taught by Engel with the composition of Spenadel since Engel suggest that they are useful when crosslinking polymers in explosive compositions and since Spenadel discloses that crosslinking agents may be used with the composition.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spenadel et al (3,697,455) as applied to claims 1-5, 7-10, 21, 22, and 24 above, and further in view of Shih et al (5,911,904).

Shih et al teaches the use of p-toluene sulfonyl semicarbazide as a blowing agent that may be used instead of the more common blowing agent, sodium bicarbonate (col. 2, lines 45-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the blowing agent as taught by Shih since Shih suggests that it is an improved blowing agent over the previously used sodium bicarbonate due to improved moisture resistance.

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7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spenadel et al (3,697,455) as applied to claims 1-5, 7-10, 21, 22, and 24 above, and further in view of Pietz (4,758,287).

Pietz et al teaches that it is known to use air bag compositions, rocket, and firearms composition for interchangeable applications. (col. 3, lines 4-20)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the composition as disclosed by Spenadel with air bag applications since Pietz suggests that both rocket and air bag compositions can be used interchangeably.

### ***Response to Arguments***

8. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that Spenadel uses a different blowing agent, regardless; Spenadel discloses that sodium bicarbonate is a known blowing agent. It would have been obvious to use sodium bicarbonate in place of another blowing agent. Even if Spenadel obtains a better benefit with a different blowing agent, the reference still discloses that it is known to use sodium bicarbonate as a blowing agent with the composition that is described by Spenadel.

Applicant also argues the method limitations. These have been adequately identified. Note each occurrence of "effective to" in the claims.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen B. Felton whose telephone number is 571.272.6875. The examiner can normally be reached on Monday-Friday 6:30-4:00, except alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571.272.1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**AILEEN FELTON**  
**PRIMARY EXAMINER**